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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							DATE February 2000		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition					

COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	131940	142753	96102	58392	11656	7073	0	0	1780438
D641 BAT	43536	16877	0	0	0	0	0	0	1060087
D687 BAT P3I	49186	80707	68466	58320	11221	5569	0	0	393151
D688 ATACMS BLK II	38308	43015	27586	0	0	0	0	0	321786
D686 ATACMS BLK IIA	652	0	0	0	0	0	0	0	652
D2NT BAT Operational Test	258	2154	50	72	435	1504	0	0	4762

A. Mission Description and Justification: The BAT is the submunition in the Block II missile system that supports the Army's deep fire doctrine calling for the destruction and disruption of threat forces and long range weapons at ranges in excess of 100 kilometers before they can influence the maneuver battle. In the past, the only options have been to engage these targets with attack helicopters or fixed wing aircraft. While effective, these options place critical resources and their air crews at risk. The BAT system significantly reduces this risk through its autonomous acquisition and terminal guidance capabilities to attack well-defended armored forces behind enemy lines. The BAT system includes the BAT submunition, a pre-planned product improvement (P3I) BAT submunition, and the Army Tactical Missile System Block II (ATACMS BLK II) missile. BAT is a dual-sensor (acoustic and infrared) submunition that autonomously seeks out and destroys moving armored vehicles without human interaction. BAT and BAT P3I submunitions are carried deep into enemy territory by the Army TACMS, then dispensed over a large target array to selectively attack and destroy individual targets. The BAT P3I program will improve the sensor and warhead subassemblies to increase lethality and to enable the BAT submunition to attack cold, stationary, armored targets and other critical high priority targets. The ATACMS BLK II missile is a version of the currently fielded and combat-proven Army TACMS Block I missile and is designed to carry 13 BAT or BAT P3I submunitions.

Page 1 of 14 Pages
Exhibit R-2 (PE 0604768A)

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

DATE
February 2000

BUDGET ACTIVITY

5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE

0604768A Brilliant Anti-Armor (BAT) Submunition

B. Program Change Summary	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget (<u>FY 2000/2001 PB</u>)	128521	128026	112149
Appropriated Value	128858	144026	
Adjustments to Appropriated Value			
a. Congressional General Reductions	-337		
b. SBIR / STTR	-460		
c. Omnibus or Other Above Threshold Reductions		-590	
d. Below Threshold Reprogramming	+3949		
e. Rescissions	-70	-683	
Adjustments to Budget Years Since <u>FY 2000/2001 PB</u>			-1295
New Army Transformation Adjustment			-14752
Current Budget Submit (<u>FY 2001 PB</u>)	131940	142753	96102

Change Summary Explanation: Funding - FY01: Project 686 was adjusted to reflect the New Army Transformation.

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition				PROJECT D641	
COST <i>(In Thousands)</i>	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
D641 BAT	43536	16877	0	0	0	0	0	0	1060087

A. Mission Description and Justification: The BAT submunition is an unpowered, aerodynamically stable vehicle approximately 36 inches long, 5.5 inches in diameter, and weighs 44 pounds. The BAT is an acoustic and infrared terminally guided submunition that searches for, tracks, and destroys moving armored combat vehicles. BAT submunitions are carried deep into enemy territory by a variant of the Army Tactical Missile System (ATACMS Block II), then dispensed over concentration of critical high-payoff targets to selectively attack and destroy individual targets. By using acoustic technology, BAT has the advantage of an extremely large footprint, which allows it to compensate for target location errors. Because the BAT is a certified round, it provides for low sustainment costs when coupled with the ATACMS Block II.

FY 1999 Accomplishments Program:

- 37542 Built hardware to support Initial Operational Test and Evaluation (IOT&E) and Live Fire Test and Evaluation (LFT&E) (supports FY 99 incremental funding of test article buildup (total test articles required is 98 BATs))
- 2999 Continued EMD program
- 2690 Supported Carrier Flight Testing and Other Integration Activities
- 305 Conducted Test Range and Target Operation, Maintenance and Improvement

Total 43536

FY 2000 Planned Program:

- 10078 Support IOT&E/LFT&E Qualification Tests (supports FY 00 incremental funding of test article buildup (total test articles required is 98 BATs))
- 2811 Conduct LFT&E
- 2933 Conduct Integration Activities
- 500 Conduct Test Range and Target Operation, Maintenance and Improvement
- 100 Trade studies and system improvement and optimization activities
- 455 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs

Total 16877

FY 2001 Planned Program: Project not funded in FY 2001

Project D641

UNCLASSIFIED

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition				PROJECT D641	
B. Other Program Funding Summary	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To Complete	Total Cost
Missile Procurement, Army CA 6100 BAT	94529	142938	134987	147713	222015	190789	196044	Continuing	2504019
<p>C. Acquisition Strategy: The BAT system is a sole source EMD program. Upon completion of the development program, BAT submunitions will be procured as part of Army TACMS Block II/BAT systems by way of a sole source production contract with Lockheed Martin Missiles and Fire Control-Dallas. Lockheed is the system integrator for the Army TACMS Block II/BAT missile system. This strategy is being followed for the FY99 and FY00 LRIP buys and will be continued through full rate production.</p>									
D. Schedule Profile	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2004</u>	<u>FY 2005</u>	
Block II/BAT LRIP DAB*	2QTR								
Award LRIP I Contract*	3QTR								
THC Qualification Tests		2QTR							
First THC Deliveries		2QTR							
IOT&E Tests Begin		3QTR							
LFT&E Tests Begin		4QTR							
Block II/BAT MSIII Decision (ASARC)			3QTR						
* Milestone completed.									

Project D641

Page 4 of 14 Pages

Exhibit R-2A (PE 0604768A)

UNCLASSIFIED

UNCLASSIFIED

ARMY RDT&E COST ANALYSIS (R-3)										DATE February 2000		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition					PROJECT D641		

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Northrop Grumman Corp	SS/CPAF/CPFF/CPIF/FPIF		767362	39881		14588					821831	
b. RDEC Support			35897	815							36712	
Subtotal Product Development:			803259	40696		14588					858543	

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Sys Eng Tech Assist & Program Mgmt Spt	SS/CPFF		60848	490							61338	
b. Misc Other Gov Act	PO		46937	362		68					47367	
Subtotal Support Costs:			107785	852		68					108705	

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Range Support	PO		22551	0		2021					24572	
b. Other Test	PO		15758	669							16427	
Subtotal Test and Evaluation:			38309	669		2021					40999	

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. In-House Support	PO		50321	1319		200					51840	
Subtotal Management Services:			50321	1319		200					51840	

Project Total Cost:			999674	43536		16877					1060087	
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Project D641
Page 5 of 14 Pages
Exhibit R-3 (PE 0604768A)

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							DATE February 2000		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition				PROJECT D687	
COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
D687 BAT P3I	49186	80707	68466	58320	11221	5569	0	0	393151
<p>A. <u>Mission Description and Justification:</u> The BAT P3I submunition maintains the Basic BAT length, diameter, and weight configurations while increasing submunition lethality and expanding the target set to be attacked. The BAT P3I program will incorporate new seeker, warhead, and microprocessor technologies into the current Basic BAT configuration while maintaining the current BAT form, fit and maximum commonality of BAT components. This program includes studies/demos pertaining to technology advancements, alternate carriers, target recognition, and acoustic/infrared/millimeter wave characterization of expanded target sets. The BAT P3I is a multi-sensored, terminally guided submunition that searches, tracks, and destroys specific targets including mobile armored combat vehicles, cold stationary armored combat vehicles, Surface-to-Surface missile (SSM) Transporter Erector Launchers (TELs), and Heavy Multiple Rocket Launchers (MRLs). BAT P3I submunitions are carried deep into enemy territory by the Army Tactical Missile System (ATACMS), then dispensed over numerous high-payoff target concentrations to selectively attack and destroy individual targets. As a certified round, the BAT P3I submunition provides a low sustainment cost when coupled with the ATACMS Block II.</p> <p>FY 1999 Planned Program:</p> <ul style="list-style-type: none"> • 26886 Completed P3I PDRR and started Continued Development Program • 16000 Procured Test Hardware (18 Seekers and 17 BAT common hardware test articles) • 2200 Conducted Target Signature Collection Activities and CFT preparation • 2400 Continued Hardware-in-the-Loop Seeker Assessments • 1500 Conducted Simulations and Algorithm Development • 200 Trade studies, Cost as an Independent Variable (CAIV) initiatives, risk reduction and system improvement and optimization activities <p>Total 49186</p> <p>FY 2000 Planned Program:</p> <ul style="list-style-type: none"> • 32221 Continue P3I BAT Seeker Development and Design • 18213 Conduct CFTs and Recoverable Flight Tests • 17900 Fabricate/Assemble Engineering Test Hardware (50 Seeker test articles) • 2000 Conduct Warhead performance tests • 3500 Continue Hardware-in-the-Loop Operations • 3500 Simulation Analysis and Modeling • 1000 Missile Carrier Integration • 200 Trade studies, CAIV initiatives, risk reduction and system improvement and optimization activities 									
Project D687			Page 6 of 14 Pages			Exhibit R-2A (PE 0604768A)			

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)		DATE February 2000																																																																																																																
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		PROJECT D687																																																																																																																
<ul style="list-style-type: none"> • 2173 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs Total 80707 <p>FY 2001 Planned Program:</p> <ul style="list-style-type: none"> • 28739 Continue Seeker Integration and System Testing • 15200 Complete Design and Fabricate P3I BAT Seeker Hardware • 14277 Conduct Engineering Design/Design Verification Tests • 4000 Continue Hardware-in-the-Loop Operations • 2000 Missile Carrier Integration • 4000 Simulation Analysis • 250 Trade studies, CAIV initiatives, risk reduction and system improvement and optimization activities Total 68466 <p>B. Other Program Funding Summary: There are no other related RDT&E or other appropriation efforts.</p> <p>C. Acquisition Strategy: The BAT P3I system employs a sole source contract with the prime contractor, Northrop Grumman Corporation. Production cut-in of BAT P3I onto the ATACMS Block II will provide full capability against moving and stationary armored targets.</p> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="text-align: left;">D. Schedule Profile</th> <th><u>FY 1999</u></th> <th><u>FY 2000</u></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> </tr> <tr> <td>Captive Flight Test (CFT)</td> <td></td> <td>1&3QTR</td> <td>2QTR</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Continuous CFT (Seeker Tests)</td> <td>4QTR*</td> <td>1&3QTR</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Warhead Testing</td> <td>1-4QTR*</td> <td>1-2QTR</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Continue Dual Mode Radar Seeker Design</td> <td>1-4QTR*</td> <td>1-4QTR</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Hardware-in-the-Loop Testing</td> <td>1-4QTR*</td> <td>1-4QTR</td> <td>1-4QTR</td> <td>1-4QTR</td> <td>1-4QTR</td> <td></td> <td></td> </tr> <tr> <td>Tactical Prototype Seeker Integration</td> <td></td> <td>2&3QTR</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Recoverable BAT Tests</td> <td></td> <td>2QTR</td> <td>1&4QTR</td> <td>3QTR</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Engineering Development Tests (EDTs)</td> <td></td> <td></td> <td>3&4QTR</td> <td>4QTR</td> <td>1&4QTR</td> <td></td> <td></td> </tr> <tr> <td>Warhead LFT&E/Soft Target</td> <td></td> <td></td> <td></td> <td></td> <td>3QTR</td> <td></td> <td></td> </tr> <tr> <td>Software CDR</td> <td></td> <td></td> <td>4QTR</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Design Verification Tests</td> <td></td> <td></td> <td>3&4QTR</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Envir Stress Test (EST) Prod Qual Tests (PQT)</td> <td></td> <td></td> <td>4QTR</td> <td>1QTR</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DT System Tests (Block II)</td> <td></td> <td></td> <td></td> <td>2QTR</td> <td></td> <td></td> <td></td> </tr> </table> <p>*Milestone completed.</p>			D. Schedule Profile	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	Captive Flight Test (CFT)		1&3QTR	2QTR					Continuous CFT (Seeker Tests)	4QTR*	1&3QTR						Warhead Testing	1-4QTR*	1-2QTR						Continue Dual Mode Radar Seeker Design	1-4QTR*	1-4QTR						Hardware-in-the-Loop Testing	1-4QTR*	1-4QTR	1-4QTR	1-4QTR	1-4QTR			Tactical Prototype Seeker Integration		2&3QTR						Recoverable BAT Tests		2QTR	1&4QTR	3QTR				Engineering Development Tests (EDTs)			3&4QTR	4QTR	1&4QTR			Warhead LFT&E/Soft Target					3QTR			Software CDR			4QTR					Design Verification Tests			3&4QTR					Envir Stress Test (EST) Prod Qual Tests (PQT)			4QTR	1QTR				DT System Tests (Block II)				2QTR			
D. Schedule Profile	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>																																																																																																											
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Hardware-in-the-Loop Testing	1-4QTR*	1-4QTR	1-4QTR	1-4QTR	1-4QTR																																																																																																													
Tactical Prototype Seeker Integration		2&3QTR																																																																																																																
Recoverable BAT Tests		2QTR	1&4QTR	3QTR																																																																																																														
Engineering Development Tests (EDTs)			3&4QTR	4QTR	1&4QTR																																																																																																													
Warhead LFT&E/Soft Target					3QTR																																																																																																													
Software CDR			4QTR																																																																																																															
Design Verification Tests			3&4QTR																																																																																																															
Envir Stress Test (EST) Prod Qual Tests (PQT)			4QTR	1QTR																																																																																																														
DT System Tests (Block II)				2QTR																																																																																																														
<div style="display: flex; justify-content: space-between;"> Project D687 Page 7 of 14 Pages Exhibit R-2A (PE 0604768A) </div>																																																																																																																		

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition			PROJECT D687
D. Schedule Profile	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Blk II/P3I BAT Production Cut-In Decision				3QTR			
Blk II/P3I BAT Continue Production Decision							1QTR
Blk II/P3I BAT Limited User Tests (LUTS)						4QTR	

Project D687

Page 8 of 14 Pages

Exhibit R-2A (PE 0604768A)

UNCLASSIFIED

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ARMY RDT&E COST ANALYSIS (R-3)										DATE February 2000		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition					PROJECT D687		

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Northrop Grumman Corp	SS-CPIF		93175	40161		55223		43873		50112	282544	
b. RDEC Support*	PO		9919	3731		3999		2475		4498	24622	
c. TRW	SS-CPIF					2896					2896	
d. Lockheed	SS-CPIF					500		500		1100	2100	
Subtotal Product Development:			103094	43892		62618		46848		55710	312162	

Remark: *Includes Hardware-in-the Loop costs

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Sys Eng Tech Assist & Program Mgmt Spt	SS-CPFF		2655	1143		1140		1200		3400	9538	
b. Misc Other Gov Act	PO		2731	525		113		125		350	3844	
Subtotal Support Costs:			5386	1668		1253		1325		3750	13382	

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Range Support	PO		35	235		1542		6835		8995	17642	
b. Other Test Activities	PO		5995	1316		11519		10080		3210	32120	
Subtotal Test and Evaluation:			6030	1551		13061		16915		12205	49762	

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. In-House Support	PO		5172	2075		3775		3378		3445	17845	
Subtotal Management Services:			5172	2075		3775		3378		3445	17845	

Project Total Cost:			119682	49186		80707		68466		75110	393151	
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Project D687	Page 9 of 14 Pages	Exhibit R-3 (PE 0604768A)
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UNCLASSIFIED

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition				PROJECT D688	
COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
D688 ATACMS BLK II	38308	43015	27586	0	0	0	0	0	321786
<p>A. Mission Description and Justification: The Army Tactical Missile System Block II (ATACMS BLK II) is a ground launched, solid propellant, inertially guided Global Positioning System (GPS)-aided missile system with 13 Basic BATs or BAT P3Is as its payload. The mission of the ATACMS BLK II is to delay, disrupt, neutralize, or destroy armored combat vehicles and other critical high-payoff targets. Once the BAT P3I submunition is incorporated into the ATACMS BLK II, the target set will expand to include cold stationary armored combat vehicles. The ATACMS BLK II will carry and dispense BAT and BAT P3I submunitions deep into enemy territory where these submunitions will autonomously track and destroy numerous critical high-payoff targets. The ATACMS BLK II will be capable of being launched from the M270 Launcher with the Improved Position Determining System (IPDS) and the M270A1 launcher. Funds also cover the costs of trade studies/demonstrations pertaining to technology advancements, payload variants, propulsion, guidance and control, and fire control improvements.</p> <p>FY 1999 Planned Program:</p> <ul style="list-style-type: none"> • 24702 Continued Development and Subsystem Qualification • 6299 Continued pilot production line and IOT&E preparation activities • 3483 Completed PQT and conduct development testing (DT) • 1073 Conducted M270A1 Launcher Integration Tests • 1451 Conducted C4I System Integration Tests • 1300 Continued Command and Control Software Design, Development and Test <p>Total 38308</p> <p>FY 2000 Planned Program:</p> <ul style="list-style-type: none"> • 16533 Prepare for and conduct IOT&E • 16000 TACMS 2000 Cost reduction activities for Block II/BAT Missile System • 4724 Complete missile and submunition integration activities and complete DT • 2100 Continue Command and Control Software Design, Development and Test • 2000 Complete Launcher Integration Tests • 500 Trade studies and system improvement and optimization activities • 1158 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs <p>Total 43015</p>									
Project D688			Page 10 of 14 Pages			Exhibit R-2A (PE 0604768A)			

UNCLASSIFIED

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<p>FY 2001 Planned Program:</p> <ul style="list-style-type: none"> • 14186 Continue and complete IOT&E • 400 Continue Command and Control Software Design, Development and Test • 13000 Trade studies and system improvement and optimization activities <p>Total 27586</p>																																																								
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<p>B. <u>Acquisition Strategy:</u> The Army Tactical Missile System Block II is a sole source EMD program. Upon completion of the development program, the Army TACMS Block II/BAT systems will be procured by way of a sole source production contract with Lockheed Martin Missiles and Fire Control-Dallas. Lockheed is the system integrator for the Army TACMS Block II/BAT missile system. This strategy is being followed for the FY99 and FY00 LRIP buys and will be continued through full rate production.</p>																																																								
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<div style="display: flex; justify-content: space-between; padding: 10px;"> Project D688 Page 11 of 14 Pages Exhibit R-2A (PE 0604768A) </div>																																																								

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ARMY RDT&E COST ANALYSIS (R-3)										DATE February 2000		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition					PROJECT D688		

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. LMVS	SS/CPIF		164099	19009		22678		8970			214756	
b. RDEC Support	PO		7012	1026		2263		1500			11801	
Subtotal Product Development:			171111	20035		24941		10470			226557	

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Sys Eng Tech Assist & Program Mgmt Spt	SS/CPFF		4177	1447		1579		1140			8343	
b. Misc OGA Activities	PO		9772	923		660		500			11855	
Subtotal Support Costs:			13949	2370		2239		1640			20198	

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Range Support	PO		8381	6229		8026		6554			29190	
b. Other Test Activity	PO		5984	6487		3925		5273			21669	
Subtotal Test and Evaluation:			14365	12716		11951		11827			50859	

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. In-House Support	PO		13452	3187		3884		3649			24172	
Subtotal Management Services:			13452	3187		3884		3649			24172	

Project Total Cost:			212877	38308		43015		27586			321786	
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Project D688
Page 12 of 14 Pages
Exhibit R-3 (PE 0604768A)

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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								DATE February 2000	
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition				PROJECT D686	
COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
D686 ATACMS BLK IIA	652	0	0	0	0	0	0	0	652
<p>A. <u>Mission Description and Justification:</u> The Army TACMS Block IIA (ATACMS Block IIA) will be a ground launched, solid propellant, inertially guided Global Positioning System (GPS) aided missile system with 6 BAT P3I submunitions as its payload. The mission of the ATACMS Block IIA will be to delay, disrupt, or destroy the Block II target sets plus cold stationary armored combat vehicles as well as moving and stationary heavy multiple rocket launchers (MRLs) and surface-to-surface missile (SSM) transporter erector launchers (TELs). The ATACMS Block IIA will be launched from the M270A1 launcher in response to the same Command and Control (C2) systems applicable to the Block I, Block IA, and Block II missiles. The range of the Block IIA missile will be significantly greater than that of the Block II. The Army TACMS Block IIA was terminated and the funds realigned in support of higher priority requirements of the New Army Transformation.</p> <p>FY 1999 Planned Program:</p> <ul style="list-style-type: none"> • 652 Awarded trade studies and system improvement and optimization activities contract <p>Total 652</p> <p>FY 2000 Planned Program: Project not funded in FY 2000</p> <p>FY 2001 Planned Program: Project not funded in FY 2001</p> <p>B. <u>Other Program Funding Summary:</u> There are no other RDT&E of other appropriation efforts</p> <p>C. <u>Acquisition Strategy:</u> Not applicable.</p> <p>D. <u>Schedule Profile:</u> There are no applicable schedule milestones for this effort</p>									
<div style="display: flex; justify-content: space-between;"> Project D686 Page 13 of 14 Pages Exhibit R-2A (PE 0604768A) </div>									

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							DATE February 2000																		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604768A Brilliant Anti-Armor (BAT) Submunition				PROJECT D2NT																	
COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost																
D2NT BAT Operational Test	258	2154	50	72	435	1504	0	0	4762																
<p>A. <u>Mission Description and Justification:</u> Project D2NT finances the direct costs of planning and conducting operational testing and evaluation of the BAT submunition by the Operational Test and Evaluation Command (OPTEC). Operational testing is conducted under conditions as similar as possible to those encountered in actual combat with typical soldiers trained to employ the system. OPTEC provides the Army leadership with an independent test and evaluation of both the effectiveness and suitability of the system.</p> <p>FY 1999 Planned Program:</p> <ul style="list-style-type: none"> • 258 IOTE planning and preparation <p>Total 258</p> <p>FY 2000 Planned Program:</p> <ul style="list-style-type: none"> • 2096 IOTE planning and preparation. Support IOTE tests. • 58 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs <p>Total 2154</p> <p>FY 2001 Planned Program:</p> <ul style="list-style-type: none"> • 50 IOTE planning and preparation <p>Total 50</p> <p>B. <u>Other Program Funding Summary:</u> There are no other related RDT&E or other appropriation efforts.</p> <p>C. <u>Acquisition Strategy:</u> Not applicable.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">D. <u>Schedule Profile</u></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> </tr> </thead> <tbody> <tr> <td>Planning and Preparation of IOT&E Activities</td> <td style="text-align: center;">1QTR*</td> <td style="text-align: center;">1QTR</td> <td style="text-align: center;">1QTR</td> <td style="text-align: center;">1QTR</td> <td style="text-align: center;">1QTR</td> <td style="text-align: center;">1QTR</td> <td></td> </tr> </tbody> </table> <p>*Milestone completed</p>										D. <u>Schedule Profile</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	Planning and Preparation of IOT&E Activities	1QTR*	1QTR	1QTR	1QTR	1QTR	1QTR	
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Project D2NT
Page 14 of 14 Pages
Exhibit R-2A (PE 0604768A)